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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,161	02/19/2004	David Bryant	DC-05585	5008
33438	7590	01/10/2005	EXAMINER HYEON, HAE M	
HAMILTON & TERRILE, LLP P.O. BOX 203518 AUSTIN, TX 78720			ART UNIT 2839	PAPER NUMBER

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/782,161

Applicant(s)

BRYANT, DAVID

Examiner

Hae M Hyeon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because the reference number 34 in Figure 3 is not pointing at the processor LGA connectors 34. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: On page 5, line 24, "processor 12" should be -- processor 16 --.

Appropriate correction is required.

Claim Objections

3. Claims 4 and 7 are objected to because of the following informalities:

- Claim 4, line 2, it seems that “adhesive” should be -- an adhesive --.
- Claim 7, line 2 has the same problem as claim 4.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 5 and 6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 5 and 6 recite that the springs are disposed between the processor and the motherboard. While the drawings show the motherboard, the present specification does not describe that the springs are disposed between the processor and the motherboard. Figure 1 shows the springs 30 being disposed between the socket frame and the socket body. However, the present specification page 6, lines 3-6 states, “springs 30 disposed about the circumference of processor 16 lift processor 16 as load plate 12 is released so that the processor and socket connectors are out of contact and the processor is accessible for manual movement.” Although, it can be said that the springs 30 shown in Figure 1 is in between the processor and the

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motherboard since the socket frame 10 is in between the processor and the motherboard.

However, the springs placed under the socket frame can be said to be in between the processor and the motherboard, too, but the springs cannot separate the processor from the socket connectors as stated on page 6, lines 3-6. Furthermore, the springs 30 shown in Figure 1 also cannot separate the processor from the socket connector since the springs are located under the socket body 18, which are not in contact with the processor 16. Thus, the location of the spring in the socket is important in order to achieve the separation between the processor and the socket connectors as stated on page 6, lines 3-6. However, claims 5 and 6 are reciting the location of the springs broadly. Thus, it is not clear how the springs recited in claims 5 and 6 can bias the processor out of the socket.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 4-8, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ikeya (5,688,128).

Ikeya discloses system comprising a motherboard 70, a socket frame 10, a socket 42, a processor 60, a load plate 12 and a processor extraction device in form of an adhesive and a plurality of springs 44. Although Ikeya does not disclose plural components for processing information, it is inherent that the system of Ikeya has plural components because an electronic

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device with a motherboard has plural components for processing information. The socket frame 10 is coupled to the motherboard 70. The socket 42 is disposed within the socket frame 10. The socket has plural connectors 50 in electrical communication with the motherboard 70. The load plate 12 is coupled to the socket frame 10 and has a closed position and an opened position over the processor 60. Column 4, lines 25-32 state that the processor 60 is held in carrier 62 by an adhesive. Therefore, the adhesive is disposed in between the load plate 12 and the processor 60 since the carrier 62 is in between the load plate 12 and the processor 60. When the load plate 12 is in the open position, the processor 60 is extracted. Also, the springs 44 are disposed between the processor 60 and the motherboard 70 to provide a uniform extraction forces to the processor 60 and bias the processor 60 out of the socket 42.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over McHugh et al (6,758,691 B1) in view of Ikeya (5,688,128).

McHugh discloses system 1 comprising a socket frame 10, a land grid array socket 11, a processor 2, and a load plate 14. Although McHugh does not disclose plural components for processing information, it is inherent that the system of McHugh has plural components because an electronic device with a motherboard has plural components for processing information.

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Furthermore, the examiner will not explain the functions of each element since the system of McHugh is the same type of system as the instant invention. The only thing that McHugh does not disclose is processor extraction device comprising an adhesive disposed between the load plate and the processor or a spring disposed between the processor and the motherboard.

Ikeya discloses a system comprising a socket frame 10, a socket 42, a processor 60, a load plate 14, and a processor extraction device in form of an adhesive or a spring 44. Since, the examiner has already explained the structure of Ikeya's system, the examiner will omit the description of Ikeya's system (see 35 U.S.C. 102(b) Rejection in the above paragraph 6).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to add the processor extraction device in form of an adhesive or a spring as taught by Ikeya in the system taught by McHugh in order to provide an assistance to a processor extracting process from a socket of the system.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 6,726,500 B1 by McHugh et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae M Hyeon whose telephone number is 571-272-2093. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas C Patel can be reached on (571) 272-2098. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hae M Hyeon
Primary Examiner
Art Unit 2839

hnh hnh

Hae Moon Hyeon